

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,481	. 06/20/2003	Johannes Vlemmings	2604	6324
7.	7590 06/23/2004		EXAMINER	
STRIKER, STRIKER & STENBY			MOHANDESI, IRAJ A	
103 East Neck Road Huntington, NY 11743			ART UNIT	PAPER NUMBER
			2834	
			DATE MAILED: 06/23/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		- m
	Application N .	Applicant(s)
	10/600,481	VLEMMINGS ET AL.
Office Action Summary	Examin r	Art Unit
	Iraj A Mohandesi	2834
The MAILING DATE f this communication app Period for Reply	ars in the cover sheet with the	correspondenc address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
<ol> <li>Responsive to communication(s) filed on <u>20 Ju</u></li> <li>This action is FINAL.</li> <li>Since this application is in condition for alloware closed in accordance with the practice under Exercise.</li> </ol>	action is non-final.	
Disp sition of Claims		
4)  Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-15 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or Application Papers  9)  The specification is objected to by the Examine 10)  The drawing(s) filed on 20 June 2003 is/are: a)	r. election requirement.	by the Examiner.
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Ex	= : :	-
Pri rity under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> </ul>	s have been received. s have been received in Applicat ity documents have been receive	ion No
* See the attached detailed Office action for a list of	of the certified copies not receive	ed.
Attachm nt(s)		
1) Notice of R ferences Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing R view (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 06/20/2003.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	

Page 2

Application/Control Number: 10/600,481

Art Unit: 2834

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5,7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koelner Manfred 0548732 A2 EU patent in view of Pyrhoenen US patent 6,184,606. Regarding claim 1,Koelner'0548732 discloses an electrical machine comprising a stator(4), a rotor (5), rotor shaft (14), a sheet (2),a squirrel cage (8,9), connected to the rotor (5), the cage has short circuit ring (8) and secured with an annular reinforcements element (10).

**Koelner'0548732** teaches all limitation of claim 1 except for the enforcement elements do not overlap adjacent ,outer surface of the short circuit rings.

**Pyrhoenen'606** discloses a squirrel cage rotor having reinforcement elements (18' Fig. 1,) at both side of the rotor attached to the short circuit rings for the purpose of reinforcing the short circuit rings.

Therefor it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine **Ko Iner'732** rotor with reinforcement elements as taught by **Pyrho nen'606** for the above purpose.

Application/Control Number: 10/600,481

Art Unit: 2834

Regarding claim 2-5,7-9,11-15 **Pyrhoenen'606** discloses a squirrel cage rotor ,wherein the outer surface of the reinforcement element and outer surface of the short circuit ring are flush with another and the reinforcement element are pressed in an axial direction and , (see Fig.1,2) and the circuit rings are made from copper (18,column 3,line 53) and the stack of sheets is supported with short circuit rings between the reinforcement elements (see Fig.1,2) and the reinforcement rings are welded, column 4 ,lines 20-22) and the elements "rings" are inherently pressed onto the rotor (see Fig.1,2). Regarding claim 10,**Koelner'0548732** discloses an electrical machine having reinforcement elements overlie radialy inwardly an inner circumferential surface of the short circuit rings (10 .Fig.2).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination **Koelner'0548732**, **Pyrhoenen'606** and further in view of **Bawin US patent 5,512,792**.

combination **Koelner'732**, **Pyrhoenen'606** teaches all limitation of claimed invention except only at least one of the reinforcement elements is screwed.

Bawin'792, discloses an electrical machine with a stacked rotor having a reinforcement elements, which is screwed for the purpose of holding the short circuit ring to the rotor. Therefor it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify combination Koelner'732, Pyrhoenen'606 rotor with reinforcement elements, which is screwed taught by Bawin'792 for the above purpose.

Art Unit: 2834

Application/Control Number: 10/600,481

## **Communication**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sang Sh

IM June 21, 2004

DANG LE PRIMARY EXAMINER